Commission and procedure of examination by Pre Public Investment Board in respect of power projects has been dispensed with in order to reduce the time cycle of sanctioning of public sector projects.

4. The limit for incurring capital expenditure on new project without Government approval has been enhanced for Central Public Sector Undertakings (CPSUs).

5. The National Thermal Power Corporation which is Navratna Public Sector Undertaking, and Damodar Valley Corporation, which is a statutory organization created by an Act of Parliament do not require any approval of the Government of incurring capital expenditure for taking up new projects.

6. Concerned State Government grants the investment approval for power project under the State Sector.

Demand and supply of power

1294. SHRI JANARDHANA POOJARY: Will the Minister of POWER be pleased to state:

(a) the quantum of power generated in the country during the last five years, year-wise and State-wise;

(b) whether the demand for power is continuously on the rise from agricultural, industrial and non-production (household) sectors;

(c) if so, the details for the last five years, year-wise, State-wise and sector-wise;

(d) whether it is a fact that loss to the extent of 40 per cent is suffered by the power plants at the production and distribution stage itself; and

(e) if so,the measures proposed to be taken to minimize such loss and enhance power generation in the country?

THE MINISTER OF POWER (SHRI SUSHIL KUMAR SHINDE): (a) The details of quantum of power generated in the various States of the country during the last five years are enclosed of Statement-I (*See* below).

(b) and (c) A Statement indicating (State-wise and category-wise)

energy consumption data for last five years is enclosed is Statement (*See* below). It may be seen that there has been a rising trend in the pattern of energy consumption in the various categories of consumers *viz.* Agricultural, Industrial and Domestic except for the year 2001-02, wherein the energy consumption in Industrial and agricultural sector has shown a marginal decline.

(d) In the process of delivering the power to the consumers, some power is consumed for meeting the requirement of the auxiliaries & in transformation loss from generation voltage to transmission voltage in the power plants. Subsequently, losses occur in transmission and distribution.

While the auxiliary power consumption in thermal power stations has been about 9.0%, the same in hydro power stations has been upto 1%. The percentage loss in the country during 2004-05 due to transformation, transmission and distribution including energy unaccounted for was 31.25%

(e) The following measures are proposed to be taken to minimize aforementioned losses:

- Adoption of better operation and maintenance practices.
- 100% metering on Consumers Powers Supply, 11 kV feeders and Distribution Transformers.
- Strengthening the anti-theft vigilance activities.
- Carrying-out energy audit.

The following steps have been taken/are being taken to improve power generation in the country.

(i) Rigorous monitoring of capacity addition of the on-going generation projects.

(ii) Advance planning of generation capacity addition projects for the Eleventh Five Year Plan.

(iii) Implementation of Ultra Mega Power Projects of 4000 MW each to achieve benefit of economy of scale.

(iv) "Partnership in Excellence" Programme starting with adoption

of better operation and maintenance (O&M) practices to enable enhancement of Plant Load Factor (PLF) of existing thermal power stations through tie-up with well performing power utilities as a pre-cursor to renovation and modernization.

(v) Renovation, modernization and life extension of old and inefficient generation units with interest subsidy on loans by the Power Finance Corporation and Rural Electrification Corporation under Accelerated Generation and Supply Programme (AG&SP).

(vi) Tapping of surplus power from captive power plants.

(vii) Utilization of unutilized capacity of gas based stations on liquid fuel.

(viii) Coordinated operation and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.

(ix) Optimum utilization of available power by strengthening of inter-State and inter-regional transmission capacity.

Statement-I

Growth of electric power generation State-wise/year-wise

Gwh

States/U.Ts.	2000-01	2001-02	2002-03	2003-04	200405
1	2	3	4	5	6
Haryana	7237.84	8453.64	9783.14	10865.37	9847.31
Himachal Pradesh	1153.33	1336.48	1650.00	2810.95	2754.36
Jammu & Kashmir	564.00	632.88	381.00	920.00	710.72
Punjab	22433.68	23003.39	22341.37	24047.89	21677.55
Rajasthan	13316.91	14172.32	17171.06	18614.08	2098.80
Uttar Pradesh	24889.00	22633.00	22377.23	22835.51	20911.42
Uttaranchal	0.00	2914.00	3426.13	4514.77	3113.13
Chandigarh	0.00	0.00	0.00	0.00	0.00
Delhi	2552.96	2451.74	3351.30	4906.69	5476.41
Central Sector NR	72827.03	76247.71	76303.75	78147.73	84667.00
Sub-Total (N R)	144974.75	151845.16	156784.98	167662.99	170143.70

1	2	3	4	5	6
Gujarat	36080.58	32926.98	37114.15	38269.84	44230.80
Madhya Pradesh	21467.75	14038.20	15484.72	15802.08	15975.24
Chhattisgarh	0.00	8159.67	7870.17	7916.43	8307.60
Maharashtra	61539.04	63237.22	63449.15	66390.48	67078.27
Goa	304.63	307.00	273.05	202.27	336.16
D & N Haveli	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00
Central Sector WR	43839.80	45641.47	47164.72	45494.61	48156.34
Sub-Total (WR)	163231.80	164310.54	171355.96	174075.71	184084.41
Andhra Pradesh	33938.43	33915.54	33478.00	32913.93	37305.14
Karnataka	22500.61	22949.09	21011.26	22996.43	23515.43
Kerala	7152.40	7506.64	5785.80	5629.02	6514.95
Tamil Nadu	27578.64	29963.43	30821.33	30353.93	32229.72
Lakshadweep	18.92	19.86	20.89	21.87	22.61
Pondicherry	234.14	249.35	264.00	275.42	275.41
Central Sector SR	37363.75	36873.69	43285.88	47260.52	46623.64
Sub-Total (S R)	128786.89	131477.60	134667.16	139451.12	146486.90
Bihar	3594.54	732.69	594.52	447.38	206.99
Jharkhand	0.00	3906.07	3906.00	4438.83	4168.29
Orissa	7801.90	9265.44	5882.43	9119.33	1030.96
West Bengal	18123.71	20608.64	21979.05	23508.42	24888.26
D.V.C.	8193.27	7835.03	8955.59	10014.79	10845.28
A & N Islands	110.00	115.00	138.80	157.61	129.60
Sikkim	44.10	45.00	40.53	36.00	58.83
Central Sector ER	21100.67	21982.68	22991.51	29527.42	35203.03
Sub-Total (E R)	58968.19	64490.55	64488.43	77249.78	35808.24
Assam	1084.85	996.64	884.00	848.27	903.24
Manipur	2.35	0.67	0.00	0.00	1.32
Meghalaya	657.85	617.99	573.51	597.03	637.65
Nagaland	3.21	8.06	23.65	23.55	3.50
Tripura	306.54	285.74	336.38	501.48	554.76
Arunachal Pradesh	64.00	64.14	27.00	29.00	2.00
Mizoram	12.52	9.33	9.95	10.56	5.81
Central Sector NER	3111.12	3332.82	3541.93	4652.20	5824.67
Sub-Total (N E R)	5242.44	5315.39	5396.42	6662.09	7932.95
Total All India	501204.07	517439.24	532692.95	565101.69	594456.20

Statement - II

Energy Consumption in Domestic, Agriculture and Industrial Sector (2000-01 to 2004-05)

(Figs. in MUs.)

	Domestic					Industrial					Agriculture				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
State/UT	2000-01	2001-02	2002-03	2003-04	2004-05	2000-01	2001-02	2002-03	2003-04	2004-05	2000-01	2001-02	2002-03	2003-04	2004-05
Haryana	2200-68	2298.40	2367.97	2841.89	2841.89	2230.29	2574.68	2785.28	3239.83	3479.54	4535.30	4472.85	5165.08	5513.76	5682.49
Himachal Pradesh	636-52	674.42	704.86	809.79	809.79	1089.02	1122.54	1203.96	1348.99	1491.85	19.20	18.05	19.55	19.54	25.28
Jammu & Kashmir	1291.34	1147.99	1300.78	1525.60	1525.60	427.26	556.48	660.38	701.89	771.52	141.60	122.52	109.01	115.86	127.55
Punjab	4224.09	4380.72	4787.85	5083.26	5083.26	7898.35	8070.96	8121.77	8593.48	8719.19	5534.35	5451.85	5818.46	6242.86	6468.31
Rajasthan	2869.20	2882.05	3029.20	3375.96	3375.96	4611.91	4564.76	4725.28	4719.09	5202.43	7046.30	3849.91	4326.11	4274.37	5322.13
Uttar Pradesh	9051.75	9257.64	8859.79	10327.12	10327.12	5101.05	4632.78	5623.14	5096.22	6560.03	5259.71	4985.57	4820.86	4951.63	4865.83
Uttaranchal	0.00	983.84	1085.63	1010.39	1010.39	0.00	326.95	546.10	656.07	668.62	0.00	479.52	369.14	318.33	487.96
Chandigarh	254.40	266.37	293.61	356.83	356.83	191.64	202.88	204.28	208.53	244.32	2.30	2.26	2.30	2.35	1.76
Delhi	4470.07	4479.50	4492.23	6263.81	6263.81	2347.64	2341.00	1789.56	1709.00	1937.75	126.67	123	1490.29	90.82	71.65
Sub-Total (NR)	24998.05	26350.93	26721.72	31574.65	31574.65	23877.16	24395.03	25659.75	26273.1	29295.45	22665.43	19505.53	22120.00	21529.52	23052.94
Gujarat	4337.03	4263.81	4503.76	5434.31	5434.31	10994.43	11013.25	13893.19	15293.48	15867.25	15489.28	15696.16	12965.55	14360.58	12055.46
Madhya Pradesh	3863.22	3380.90	3301.05	3832.24	3832.24	6808.30	4185.64	4186.49	4370.72	4712.45	4897.74	4583.97	5196.07	5562.97	5848.78
Chhattisgarh	0.00	982.53	1093.84	1385.74	1385.74		1709.39	1840.10	2331.75	4313.45	0.00	678.19	734.14	630.89	1047.50
Maharashtra	10929.57	11907.27	12230.26	12662.35	12662.35	18793.38	17553.78	18449.50	19962.63	22680.34	9876.22	867281.00	10541.48	10572.01	10733.31
Goa	286.26	329.88	351.48	303.64	303.64	589.35	661.33	693.91	758.91	1018.89	13.30	14.01	18.09	18.27	15.93
Daman & Diu	28.23	29.15	36.93	41.98	41.98	578.63	678.68	748.65	1491.63	924.60	1.70	1.95	1.92	4.73	2.61
D & N Haveli	16.70	18.40	25.00	30.06	30.06	701.12	772.59	861.00	846.42	1705.50	0.83	0.91	1.50	2.00	5.50
Sub-Total (WR)	1946.01	20911.94	21542.32	23690.32	23690.32	384465.21	36574.66	406.74.84	45055.54	51222.48	30279.07	29648.00	29558.75	31171.45	29709.09
Andhra Pradesh	6291.15	6872.96	7117.00	7879.17	7879.17	5534.07	6889.84	7603.50	9064.58	11607.43	11747.96	12828.92	12912.10	13448.19	14160.72
Karnataka	3924.34	4087.40	4251.95	4923.79	4923.79	5805.94	6473.40	6504.78	6088.46	6470.47	7435.22	7541.34	8507.91	8992.48	9323.81

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kerala	4714.83	3744.10	3835.75	4292.16	4292.16	3814.60	3011.93	2989.37	3059.86	3008.64	350.21	187.48	183.97	188.09	200.25
Tamil Nadu	7157.13	7935.55	8837.00	11083.00	11083.00	12345.34	12832.92	13046.93	15262.21	14117.97	9311.65	9622.46	9030.00	9382.00	9786.00
Pondicherry	204.32	218.35	244.37	286.46	286.46	997.09	1140.30	1101.82	0.41	1290.14	96.89	97.12	97.63	.0.00	118.36
Lakshadweep	11.56	12.03	12.71	14.12	14.12	0.49	0.43	0.44	1187.75	0.40	0.00	0.00	0.00	117.73	0.00
Sub-Total (SR)	22303.33	22870.39	24298.78	28478.70	28478.70	28297.53	30348.82	31246.84	34643.27	36495.05	28941.93	30277.32	30731.61	32126.49	33569.14
Bihar	1076.65	744.43	1108.96	1209.30	1209.30	7173.23	829.83	756.76	783.54	819.10	1548.63	670.60	993.58	1028.74	1060.50
Jharkhand $	0.00	276.73	539.12	840.48	840.48	0.00	5541.95	5393.91	5909.23	6390.56	0.00	149.01	50.12	134.62	60.65
Orissa	2166.00	2283.74	2496.54	2663.18	2663.18	2583.00	2205.53	2925.30	3078.66	3585.00	196.00	163.91	171.76	180.76	183.11
West Bengal $	4369.23	4848.47	5208.53	5618.78	5618.78	6292.55	6482.87	7270.19	7604.26	8600.24	998.97	1183.10	724.58	785.39	833.48
A & N Islands	44.67	45.50	57.63	60.30	6030.00	4.25	4.80	4.55	4.76	4.25	0.00	0.00	0.00	0.00	0.00
Sikkim	51.62	65.30	32.20	98.50	98.50	17.50	16.00	8.60	21.39	27.00	0.00	0.00	0.00	0.00	0.00
Sub-Total (ER)	7708.17	8294.17	9442.98	10490.54	10490.54	16070.53	15080.98	16359.31	17401.84	19426.15	2743.60	2166.62	1940.04	2129.51	2137.74
Assam	536.58	674.97	711.35	722.05	722.05	700.47	600.41	650.54	637.13	591.01	40.68	9.50	51.55	50.49	14.31
Manipur	98.22	89.42	94.45	113.42	113.42	11.49	11.50	11.90	8.00	8.04	0.40	0.72	0.85	0.61	0.22
Meghalaya	152.23	164.34	185.88	171.58	171.58	120.58	172.19	284.37	455.92	490.82	0.35	0.39	0.35	0.47	0.93
Nagaland	94.80	57.55	71.41	120.02	120.02	25.72	42.67	19.95	21.48	3.65	0.00	0.09	0.00	0.00	0.00
Tripura	110.86	135.33	142.24	148.47	148.47	44.10	6.80	48.00	72.50	50.17	57.80	65.22	82.00	78.71	70.98
Arunachal Pradesh	68.50	46.18	34.72	65.00	65.00	7.36	4.70	1.67	2.64	4.50	0.00	0.00	0.00	0.00	0.00
Mizoram	97.20	99.16	109.23	84.72	84.72	1.44	7.97	1.59	1.66	1.93	0.00	0.00	0.00	0.00	0.00
Sub-Total (NER)	1158.39	1266.95	1349.28	1425.26	1425.26	911.16	896.11	1018.02	1199.32	1150.12	99.23	75.92	134.75	130.28	86.44
Total (All India)	75628.95	79694.38	83355.08	95659.47	95659.47	107621.59	107295.60	114958.76	124573.07	137589.25	84729.26	81673.39	84485.95	87089.25	88555.35

$-Includes DVCs sales to ultimate consumers in Jharkhand & West Bengal area.